WebFIT™ Implementation in Lowndes County, Georgia

Final Report

Prepared for
Lowndes County Government

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SECTION 1

Introduction

This report documents a project to implement a fiscal impact model for land use planning called WebFIT™ in Lowndes County, Georgia. The model was developed by researchers at Georgia Tech's Enterprise Innovation Institute ($EI^{2)}$ in 2003 and first implemented in Gwinnett County, Georgia. WebFIT™ resulted from years of development that began with a project in Paulding County to help its development authority justify creation of an industrial park. The county was experiencing rapid residential growth without accompanying growth in industrial and commercial development to balance its tax digest. The analyses conducted for Paulding County showed a negative impact on the county's budget should it continue to grow according to this pattern of development.

Following the Paulding effort was a project for Fayette County which included models for each city and the county's school system. The county's most recent future land use plan was used by researchers to simulate the fiscal impact of that plan on each tax jurisdiction in the county. The model consisted of a series of Excel spreadsheets with a simple interface enabling users to run a variety of fiscal impact simulations based on variations in the future land use plan.

In 2003, EI^2 began developing a web-based version of the model called WebFIT™. Late in 2003, researchers began a WebFIT™ implementation project with Gwinnett County, which represented the first implementation of the new model. Additional modifications to the model were made in 2004 and 2005, which added several new features. These include the ability to analyze large, near-term "greenfield" projects and redevelopment projects. In 2005, EI^2 began an implementation project in Houston County which completed in 2006.

A city-only version was also completed for Alpharetta, Georgia, in 2004. Alpharetta is using its version of the model to analyze the fiscal impact of rezonings, primarily from office to high-density residential.

The remainder of this report documents the data gathering and analytical tasks required to build a database for Lowndes County, as well as creation of the county's "base case" full buildout scenario. Simulation results from running the base case are contained in the last section of the report.

SECTION 2

WebFIT™ Model Structure and Requirements

WebFIT™ is a tool for land use planning that seeks to answer the primary question*: "Will local government have sufficient revenues to meet the increased demand for services when full buildout is complete."* In the context of WebFIT™, full buildout is a planned outcome. That is, it's the county's or city's future land use plan that stipulates how undeveloped land will eventually be developed over the long run; perhaps as long as 20 years.

The ultimate purpose of this tool is to help local officials, economic developers, and planners determine whether their land use plan makes sense from a fiscal perspective. With this information, officials will be in a better position to make land use decisions on how much acreage should be developed into industrial, commercial, and residential property.

Overview of the Software

WebFIT™ is a web-based application residing on a web server at Georgia Tech's Enterprise Innovation Institute ($EI^{2)}$. The application uses basic HTML with some Java script to enhance the interface. The back-end program is a compiled Visual FoxPro® application, which handles all the database tasks and calculation routines.

As a Web-based application, WebFIT™ can be accessed from any computer at any location where a user can gain access to the Internet. With the application and databases residing on EI^{2}'s server, problems and questions can be addressed more quickly than if the model were distributed to each user's location.

Security is ensured through a login procedure. Each user can only access the models that his/her login information is authorized to access.

The home page of the WebFIT™ web site is accessed with the following URL: http://webfit.innovate.gatech.edu/. Going to this web address will pull up the home page as shown in Figure 1.

The software's menu system consists of **Data Management**, **Analysis Setup**, **Run Analysis**, **View Analysis**, **Home**, **Logout,** and **Help** choices. The first four have submenus to access the data composing the model; set up a full buildout, greenfield buildout, or redevelopment scenario; run an analysis; and provide a way to view the results of running the simulation. Results are shown in tabular and graphical form.

Figure 1: WebFIT Home Page

Tax Districts, Land Districts, and Land Use Types

Lowndes County's model consists of dozens of combinations of tax district, land district, and land use types. Tax districts have one of two meanings depending on the context of the term's use within the model. The first is in relation to the county's tax digest.

A county's tax digest is divided into unincorporated and incorporated regions. The incorporated area is the sum of the areas of each municipality within the county. The remainder of the acreage composes the unincorporated area. For example, in Lowndes County, there are five municipalities that can impose their own property taxes. The county imposes property taxes on land in the unincorporated area, and also in the incorporated areas. The county school district is also considered a taxing jurisdiction because it too can apply a property tax. The school district can encompass the whole county or, when there are municipal school districts in the county, less than the whole county. For Lowndes County, there are seven tax districts to consider when estimating property taxes: unincorporated, five municipalities, and the school district.

The other meaning for the term "tax districts" refers to local governments. In that case, a list of tax districts will not include an entry for unincorporated and will, instead, contain an entry for the county, such as Lowndes County.

Land Districts

Another way in which a county is subdivided is by land district. This division is used in tax digests to divide the county into several smaller areas. Any given taxing district could fall into several land districts. The combination of tax district and land district provides the smallest geographic area within the model.

In Lowndes County, five land districts were constructed for this project based on county commission districts. Two special land districts-1A and 1B-were included because they are not contiguous to land district 1 but are "islands" surrounded by Valdosta. Table 1 shows the correspondence of tax district and land districts.

Table 1: Tax Districts and Land Districts

Tax District	Land Districts
Dasher	3
Hahira	2
Lake Park	3
Remerton	3
Valdosta	1,2,3
Unincorporated	1,2,3,1A,1B

Land Use Types

All of the parcels in each of these combinations are assigned a "land use type," so that basic statistics on each land use type within a tax district/land district area can be computed from the tax digest.

In most county tax digests, land use types are only composed of agricultural, residential, commercial, and industrial land use types, along with several special classifications such as preferential, conservation, and utility. When a county can merge its zoning information with its tax digest, a richer array of land use types can be developed from the tax digest. However, the specific zoning code assigned to undeveloped land is typically not how the land is eventually used, so for future land use planning, zoning codes are not desirable.

A county's future land use plan identifies the planning department's best estimate of how currently undeveloped land will eventually be used. It may also include parcels that have an improvement, but which will likely be redeveloped into a different land use type. Typically, this plan corresponds to "full buildout" within the next 20 years.

Land use classifications based on future land use plans (LUP) are best for a model like WebFIT™ because they enable a more precise estimation of the revenue and expenditure impacts of each land use on the local governments. However, merging land use types based on the county's future land use plan with the tax digest is seldom done. Without that, it is very difficult to use a LUP classification system in the model. Below is a list of land use codes used in the Lowndes County model.

Agriculture
Residential
Commercial
Industrial
Park/Recreational/Conservation
Institutional/Public
Undeveloped

WebFIT™'s Menu System

The menu system consists of **Data Management**, **Analysis Setup**, **View Analysis**, **Home**, and **Logout** choices. The first four have submenus for accessing various components of the model. Figure 2 shows the Data Management submenu.

Data Management

The Data Management (DM) menu item is used to access all the "base year" data in the model. The base year corresponds to the historical year, such as 2002, in which the model is based.

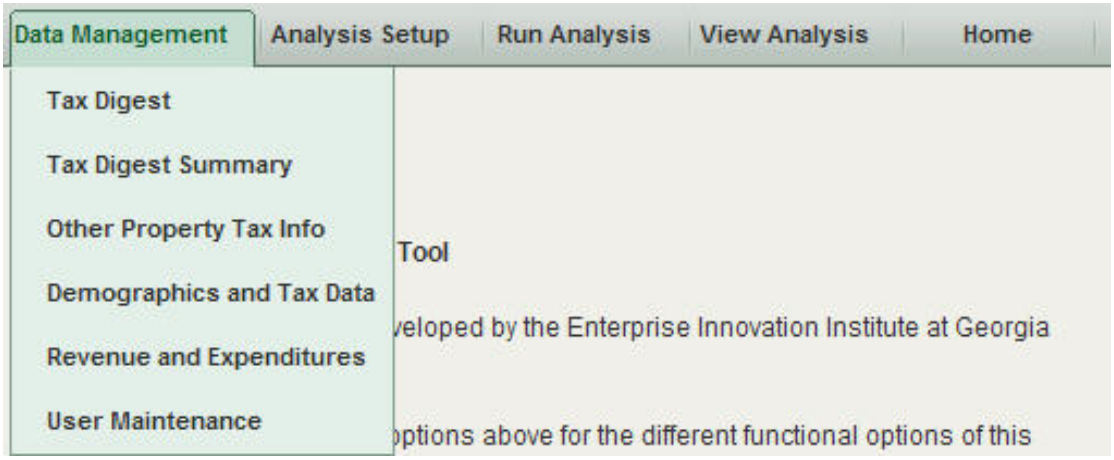


Figure 2: WebFIT™ Data Management Menu

Tax Digest

This submenu item enables a user to access parcel-level data from the current tax digest. When chosen, a new page is displayed with three list boxes – Tax Districts, Land Districts, and Land Use Types. Choose a combination and click the Submit button to view the parcels that correspond to that combination and have them displayed in a new page.

In the resulting page, you can view and edit the data for each of the parcels. With a tax digest that changes throughout the year, this provides a way to update individual parcels when something changes. Because WebFIT™ uses average values and average densities from the tax digest, keeping it updated can improve the accuracy of the model when these "default" values are used in a particular scenario.

Tax Digest Summary

This submenu item provides summary statistics for a tax district/land-district/land-use-type combination. The value of improvements (building value) is separated from land value to provide greater insight into how building and land values vary across the county. By default, WebFIT™ uses the average land value on improved properties for the land value of acreage to be developed in a scenario.

Other Property Tax Information

The previous submenu item provides statistics on key real property values. This submenu item provides data on special land use districts and on personal and inventory property. These data come from the consolidated tax digest compiled by the Georgia Department of Finance's

Property Tax Division. You can access these data from http://www.etax.dor.ga.gov/PTD/cds/csheets/index.aspx.

The property value items contained on this page are:

- Agricultural
- Preferential
- Conservation
- Utility
- Mobile homes
- Timber
- Motor vehicles
- Residential personal property
- Commercial personal, inventory, and Freeport property
- Industrial personal, inventory, and Freeport property.

Demographics and Tax-Related Data

This submenu item contains a variety of information used by WebFIT™ in its calculations of fiscal impact for any given scenario. The items contained on this page for any given tax district or for the school district may not all be used by the specified tax district. If not, the values will not be displayed.

The items shown on this page are:

- Total population
- Land area in square miles
- Population density
- Base year for analysis
- Total households
- Persons per household
- Enrollment
- Percentage of population between ages 25 and 59
- Housing units per acre – very low density
- Housing units per acre – low density
- Housing units per acre – medium density
- Housing units per acre – high density
- Housing units per acre – Ultra-high density

Tax Rates

- Property millage rate (county)
- Property millage rate (city)
- Property millage rate (school)
- Assessment rate
- Sales tax rate (local portion)
- Average percent of commercial inventory subject to Freeport
- Average percent of industrial inventory subject to Freeport
- Freeport implementation percent.

All of the information in this page is input from various sources to set up the historical values for the WebFIT™ model. These values are used as "default" values when setting up a scenario, but they can be changed by the user.

Revenues and Expenditures

This last submenu item will display local government revenues and expenditures, by category, for the base year. For the Lowndes County model, these values correspond to 2007 for the county and 2006 the cities. For the school district's revenues and expenditures, the county school system provided data for 2007.

Table 2 displays the categories and subcategories for city and county revenues and expenditures used in WebFIT™.

Table 2: Revenue and Expenditure Categories and Subcategories

Revenues	Expenditures
Property Taxes	***General Government***
Real and Personal Property Taxes	General Administration and Support Services
Motor Vehicle Taxes	Financial Administration
Tax Collection Fees	Tax Commissioner
Total	Tax Assessor/Appraiser
Sales Taxes	Building Inspection and Regulation
Local Option Sales Tax	Community Development
MARTA Tax	Natural Resources
Special Purpose Sales Tax	General Insurance
Total	Legal Fees
Excise And Special Use Tax	**Total**
Alcoholic Beverage Taxes	***Public Works***
Insurance Premium Taxes	General Government Buildings
Franchise Payment Taxes	Highways and Streets (not drainage)
Total	Parking Facilities and Meters
Licenses And Permits Revenues	Drainage
Business Licenses & Occupational Taxes	**Total**
Alcoholic Beverage Licenses	***Court System***
Building Permits	Superior Court
Other	State Court
Total	Juvenile and Magistrate Court
Service Charges	Probate Court
Parking Facilities and Meters	Clerk of Courts
Parks and Recreation Charges	Municipal Court
Ambulance Charges	**Total**
Hospital Charges	***Public Safety***
Special Assessments	Sheriff's Department
Fire Service Subscription Fees	Police Department
Other Service Charges	Correctional Institute
Total	Jail
Fines	Fire Department
Fines, Forfeits and Court Fees	Ambulance Service
Fee Collections Of County Officers	**Total**
Total	***Health Services***
Other Revenues	County or Municipal Hospital
FIFA, Penalties, Interest and Cost	Payments to Other Hospitals
Intangible Taxes	Public Health
Railroad Equipment Tax	**Total**
Hotel/Motel Tax	***Public Assistance***
Other Excise and Special Use Taxes	Public Welfare and Social Services
Interest Earnings On Investments	**Total**
Receipts From Sale of Materials and Surplus Equipment	***Recreation and Library***
Receipts From Sale of Real Property (Land and Building)	Parks and Recreation
Rents and Royalties	Education (Expenditures by General Government)
Cemetery Fees	Libraries
All Additional Revenues (includes intergovernmental transfers)	**Total**
Total	***Other Expenditures***
	Debt Service

Analysis Setup

There are now three options under **Analysis Setup** as shown in the figure below: **Full Buildout, Greenfield Buildout, Redevelopment**. The web page that appears when either **Greenfield** or **Redevelopment** is chosen displays data for all tax districts and land districts in one table.

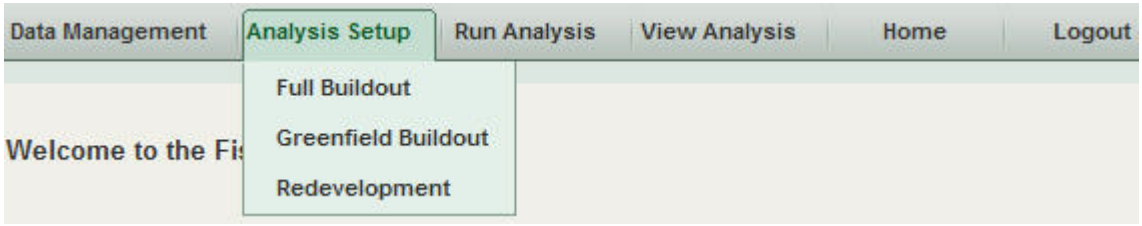


Figure 3: WebFIT™ Analysis Setup Menu

Full Buildout Profiles

This submenu item will open a page where users can develop their full buildout base profile, make copies of it to run scenarios, and delete profiles no longer needed. Each profile has property tax data and other data that are used to define the characteristics of the full buildout profile.

A full buildout profile defines how the county projects the development of its developable land. Usually, this is a 20-year plan than dictates how much residential, commercial, industrial, and green space will be developed. When a user chooses this submenu item, the Web page shown in Figure 4 is displayed.

On the left is a list box showing all the full buildout scenarios that have been set up. The one named "Base Case Scenario" is the profile that describes the best estimate of how future development will occur. On the right are two sets of list boxes for editing either land use data or other data. The tax district and land district list boxes are used with the Edit Land Use Data button and the right most tax district list box is used with the Edit Other Data button.

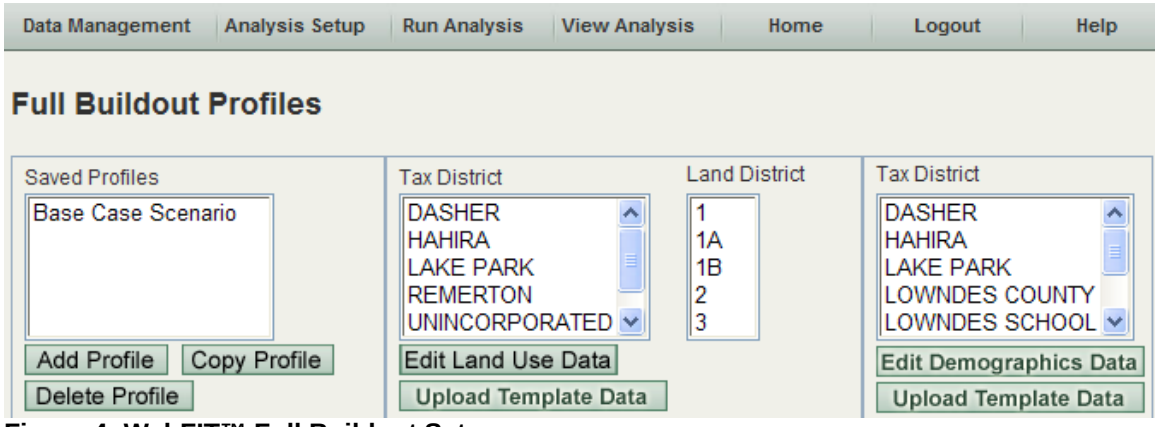


Figure 4: WebFIT™ Full Buildout Setup

Once a profile, tax district, and land district have been chosen and the Edit Land Use Data button is clicked, the following data summary is displayed. In this example, unincorporated, land district 1 is shown for the Base Case Scenario.

Base Case Scenario
UNINCORPORATED Land District 01

Back to Profiles Add New Entry

Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	UNINCORPORATED	1	Agricultural	745030	$16	$1,023	578	578
	UNINCORPORATED	1	Commercial	311	$33,407	$21,176	4	4
	UNINCORPORATED	1	Industrial	2271	$59,623	$5,751	679	679
	UNINCORPORATED	1	Institutional/Public	8297	$2,031	$3,909	266	266
	UNINCORPORATED	1	Park/Recreational/Conservation	32993	$868	$1,741	454	454
	UNINCORPORATED	1	Residential	32409	$5,467	$3,699	1934	1934

Figure 5: Example of Full Buildout Setup

Notice that the table displays the number of acres to be devoted to this full buildout profile for the tax-district/land-district/land-use-type combination chosen. The amount under the "Acres Used" column is the number of acres to be built out and the amount under the "Total Acres Available" column is the amount that was designated in the land use plan for this combination.

Greenfield Project Profiles

The profile for a greenfield project has the same structure as the profile for a full buildout profile. However, a greenfield project is developed one row at a time. When you set up a new greenfield profile, use the Add Profile button to begin the process. When you click on the Edit Land Use Data button, a page appears with drop-down menus for choosing a tax district, land district, and land use type. Each of the data boxes can be edited to add information required for the greenfield project.

Greenfield test

Back to Profiles Add New Entry

Options	Tax District	Land District	Land Use Type	Acres	Total Bldg Value	Total Land Value	Total Value	Total Value per Acre
	Select Tax District		Select Land Use Type	0	$0	$0	$0	$0

Save Retrieve Values Cancel

Figure 6: Example of Greenfield Setup

Once you choose a tax district, land district, land use type combination and enter a value for the acres column, you can use the Retrieve Values button to retrieve average building and land values from the tax digest summary corresponding to this combination. The average building and land values are used with the acreage figure to calculate total building and land values. If actual values for the project exist, then they should be used instead. Use the **Add New Entry** button to add another row.

Redevelopment Project Profiles

Redevelopment profiles add another dimension to the way property value data is entered to describe the characteristics of the project. Redevelopment implies there are existing improvements on the parcels to be redeveloped. There are two ways that WebFIT™ enables a user to enter the data that describes the existing developments on the affected parcels.

The first and easiest method is to import a list of parcel numbers, or PINs[1], that define the land in the project. This can be done by importing the PINs from an Excel spreadsheet. The list of PINs must be in column A, sheet 1, of the spreadsheet with no column title. That means that cell A1 contains the first PIN followed by all the other PINs starting in cell A2 and moving down the column. Once these PINs are uploaded, the program summarizes the data attributes of the parcels from the tax digest into a table for display.

The table is displayed in a new web page with the title "Original Land Use Values" at the top. Although one can edit these values, it is unlikely to be necessary. To begin constructing how the redevelopment project will look, select the **Back to Profiles** link and choose the ◯ **Redev Land Use** radio button. That displays a copy of the data shown in the previous table as a starting point to make the process easier. A user can edit values in this table to create the redevelopment project as well as delete rows, change the values of existing rows, or add new rows to construct the redevelopment project.

If a user doesn't choose the upload option, he or she can build the original data manually. The following figure shows what appears when you click the Edit Land Use Data button to begin this process.

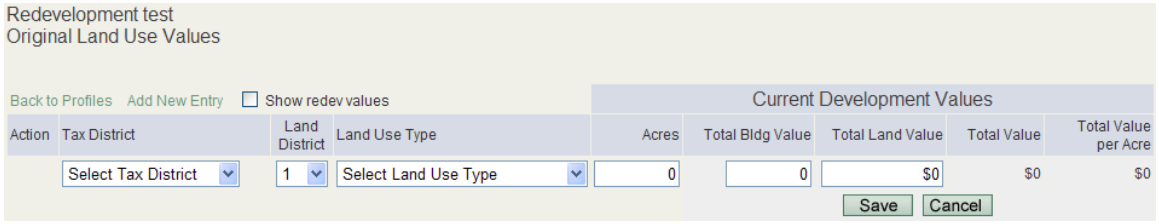


Figure 7: Example of Redevelopment Setup

Notice that the column headings are the same as those for a greenfield profile. After the original profile is completed, the redevelopment profile is created in the same manner.

Run Analysis

The Run Analysis menu item executes a full buildout, greenfield, or redevelopment setup to perform the analysis. Figure 8 illustrates this menu item.

Figure 8: Run Analysis Menu

[1] A parcel ID number must be preceded by a capital "R" to denote real property. This is a convention used by the tax assessor's office to distinguish different types of property records in the tax digest.

Run Full Buildout Analysis

This submenu item will open a Web page that displays a list box containing the full buildout profiles. Simply click on a profile and then click on the Submit button. Running a full buildout analysis can take up to a minute to complete. While it's running, the page is refreshed and the minutes/seconds counter is updated periodically. This is required to ensure that display of the page is not timed out.

Run Greenfield Analysis

This submenu item will open a Web page that displays a list box containing the greenfield profiles. Simply click on a profile and then click on the Submit button. Running this analysis won't take as long as it takes for a full buildout analysis to complete.

Run Redevelopment Analysis

This submenu item will open a Web page that displays a list box containing the redevelopment profiles. Simply click on a profile and then click on the Submit button. Running this analysis won't take as long as it takes for a full buildout analysis to complete.

View Analysis

Once an analysis has been completed, you can display various reports and charts of the results. This menu item has three submenus, one for each type of analysis, and each with its own submenu of reports. Figure 9 shows the cascading submenus for viewing results of a full buildout. The structure is the same for the other two types of analyses.

Figure 9: WebFIT View Analysis – Full Buildout

Fiscal Impact

This submenu item will display a Web page where the user chooses a profile, a tax district, and what data to display and how. The data choices are revenues, expenditures, or summary. The last is a brief report showing total revenues and total expenditures in both table and chart format. Format choices are between table, chart, or Excel spreadsheet. If you choose the Excel option, then you are asked to either save the file or open it in Excel. Because of limitations with this Microsoft option, the file is actually read in HTML format so that Excel may ask you if you really want to open the file. Just click "Yes" and proceed. When you save the file, you'll again be asked about the format of the file. You should choose to save it in an Excel format.

Property Values

This submenu item will display real, personal, and inventory property values resulting from the analysis. In the Web page that appears, you choose a profile, a tax district, and a land district. Then choose table or chart. The land district is needed because the real property values are available for each tax district/land district combination. When different land districts are chosen

for a given tax district, the personal and inventory property results don't change because they correspond to the tax district and are not available at the land district level.

The "Show all land districts" check box is for choosing to view property values for all land districts of the chosen tax district, in one report. The "Sum all incorporated areas" check box will provide total incorporated property values.

You can also choose to view the sum of property values across land districts by not choosing a land district and not checking the "Show all land districts" check box.

Demographics

This submenu item will display population, household, and school enrollment results. These data are displayed in a table or a chart for each local government chosen from the list box. If you choose Cities, you get data on all the municipalities in the model.

SECTION 3

Data Collection and Analysis

The WebFIT™ model requires parcel-level tax digest data for the entire county. At a minimum, the tax digest should contain a parcel identification number (PIN), a tax district code, a land district code, acreage of the parcel, tax assessor's land use code and strata, the assessed value of improvements, the assessed value of the land, and exemption code. These data items are typically available for all counties in the state, but the quality can vary greatly. If a parcel is not coded with any of these data items, it cannot be used to produce a tax digest summary of developed and undeveloped property for use in WebFIT™.

Some counties are now producing a geographic-based tax digest in a software package called a Geographic Information System (GIS). This software tool enables planners to represent parcels as geographic shapes called polygons that together compose the geography of the county. Data items can be associated with parcels for display and analysis. Typically, planners use this system to create an existing and a future land use map of the county. Each is considered a "layer" in the GIS, and each land use type contained in the layer is color coded to produce a map that can visually depict current and/or future development. The current and future land use layers can be tied to the parcel-level layer to assign a land use code to each parcel.

Tax Digest for Lowndes County

Fortunately, the county's GIS system contains all the property value information required for the model. Therefore, it was not necessary to obtain a separate tax digest from the tax assessor's office.

Assigning Land Districts

One problem encountered with the GIS database was the lack of a land district field to enable the division of unincorporated Lowndes County into smaller geographic areas. The solution was to use the current commission districts to divide unincorporated Lowndes County into five separate sub-regions. This also divides each city into separate land districts if the city limits contains more than one commission district. Table 3 shows the assignment of land districts to tax districts.

Table 3: Tax Districts and Land Districts

Tax District	Land Districts
Dasher	3
Hahira	2
Lake Park	3
Remerton	3
Valdosta	1,2,3
Unincorporated	1,2,3,1A,1B

Assigning Land Use Codes

One set of land use codes are needed to identify current and future land use tyeps for every parcel in the database. Table 4 shows the list of land use codes used by Lowndes County. The aggregate-type column shows into which of four categories each land use falls. If a more diverse set of land use types are developed, such as several residential types based on densities, then the assignment to aggregate type would be more important.

Table 4: Land Use Types

Land Use Type	Aggregate Type
Agriculture	Agriculture
Residential	Residential
Commercial	Commercial
Industrial	Industrial
Park/Recreational/Conservation	Public
Institutional/Public	Public
Undeveloped	N/A

The "undeveloped" land use type is used to distinguish between parcels with current development and those that are potentially part of the future land use plan. Redevelopment of existing parcels is also possible and would show up when the current land use and future land use fields are different (and the current land use is not set to undeveloped) for a given parcel.

WebFIT™ Tax Digest Database

Creation of the land district and land use type fields completed the tax digest database for the model. The final field list of the WebFIT™ tax digest is shown in Table 5 below. The AVAILDEV field is a true/false field indicating whether the parcel is developed or undeveloped (developable). There is a set of fields to describe the current status of a parcel and a set of fields to describe the future status, as defined by the future land use plan. The set of current fields use "BASE" in the field name and the set of future fields use "FUTURE" in the field name. For example, the MARKVALBASE field is the sum of the BLDGVALBASE and LANDVALBASE fields and represents the current market value of the parcel, including the value of the improvement.

Table 5: Lowndes WebFIT Tax Digest Structure

Field Name	Type	Length	Decimal
ID	Integer	4	0
PARCELID	Character	20	0
OWNER	Character	40	0
ADDRESS1	Character	40	0
ADDRESS2	Character	40	0
CITY	Character	25	0
ZIPCODE	Character	10	0
TAXDIST	Character	2	0
TDNAME	Character	20	0
LANDDIST	Character	2	0
ZONING	Character	8	0
BUILDCODE	Character	2	0
LANDCODE	Character	2	0
ACRES	Numeric	8	3
LUTYPEBASE	Integer	4	0
BLDGVALBASE	Numeric	11	0
LANDVALBASE	Numeric	11	0
MARKVALBASE	Numeric	11	0
BASEYEAR	Integer	4	0
LUTYPEFUTURE	Integer	4	0
BLDGVALFUTURE	Numeric	11	0
LANDVALFUTURE	Numeric	11	0
MARKVALFUTURE	Numeric	11	0
AVAILDEV	Logical	1	0
AVAILREDEV	Logical	1	0
FUTUREYEAR	Integer	4	0

Tax Digest Summaries

With the WebFIT™ tax digest completed summaries for each city and unincorporated Lowndes County can now be created. Tables 6 through 9 show summaries of the number of parcels, acres, building value, land value, and total value by city, land district, and land use type for current conditions. All property values are at 100 percent of market value.

The list of land use types in each table only includes those found in the respective city and land district. The last land use type in each table shows the number of parcels, acreage and total land value of the undeveloped parcels in the city/land district combination. For example, in the City of Hahira which is entirely in land district 2, there are about 1,253 acres without an improvement and therefore potentially available for future development.

Table 6: Tax Digest Summary of Current Conditions - Dasher

Land District 3

Land Use Type	Parcels	Acres	Building Value	Land Value	Total Value
Residential	375	832.51	$27,131,307	$5,597,118	$32,728,425
Commercial	9	24.64	$323,729	$125,645	$449,374
Agriculture	30	2250.94	$2,581,448	$2,443,551	$5,024,999
Park/Recreational/Conservation	28	1763.42	$1,926,165	$2,117,235	$4,043,400
Institutional/Public	24	204.38	$5,549,354	$490,850	$6,040,204
Undeveloped	0	0.00	$0	$0	$0
TOTAL	466	5,075.88	$37,512,003	$10,774,399	$48,286,402

Table 7: Tax Digest Summary of Current Conditions - Hahira

Land District 2

Land Use Type	Parcels	Acres	Building Value	Land Value	Total Value
Residential	673	287.04	$46,619,322	$10,219,889	$56,839,211
Commercial	114	201.15	$21,799,401	$2,779,847	$24,579,248
Industrial	29	308.59	$19,879,565	$1,353,304	$21,232,869
Agriculture	2	151.00	$6,362	$247,898	$254,260
Park/Recreational/Conservation	7	245.02	$196,953	$761,537	$958,490
Institutional/Public	98	189.41	$18,776,341	$2,337,900	$21,114,241
Undeveloped	344	523.57	$1,896,988	$7,267,743	$9,164,731
TOTAL	1,267	1,905.77	$109,174,932	$24,968,118	$134,143,050

Table 8: Tax Digest Summary of Current Conditions - Lake Park

Land District 3

Land Use Type	Parcels	Acres	Building Value	Land Value	Total Value
Residential	246	188.60	$22,198,495	$16,269,855	$38,468,350
Commercial	69	94.60	$11,890,509	$3,010,079	$14,900,588
Industrial	6	34.62	$2,349,990	$290,800	$2,640,790
Park/Recreational/Conservation	1	8.00	$360	$19,000	$19,360
Institutional/Public	41	83.57	$10,490,490	$1,367,440	$11,857,930
Undeveloped	137	428.01	$253,586	$5,800,285	$6,053,871
TOTAL	500	837.40	$47,183,430	$26,757,459	$73,940,889

Table 9: Tax Digest Summary of Current Conditions - Remerton

Land District 2

Land Use Type	Parcels	Acres	Building Value	Land Value	Total Value
Residential	215	34.23	$13,185,639	$5,033,504	$18,219,143
Commercial	99	65.60	$25,772,686	$8,008,907	$33,781,593
Institutional/Public	9	10.44	$137,772	$1,619,135	$1,756,907
Undeveloped	8	2.08	$12,375	$78,476	$90,851
TOTAL	331	112.35	$39,108,472	$14,740,022	$53,848,494

Table 10: Tax Digest Summary of Current Conditions - Valdosta

Land District 1

Land Use Type	Parcels	Acres	Building Value	Land Value	Total Value
Residential	6,425	1,673.07	$277,898,788	$50,710,668	$328,609,456
Commercial	1,016	1,306.76	$272,095,506	$84,506,265	$356,601,771
Industrial	193	1,764.99	$89,921,460	$21,026,851	$110,948,311
Agriculture	7	15,009.12	$302,456	$14,108,703	$14,411,159
Park/Recreational/Conservation	39	229.09	$3,274,075	$1,438,166	$4,712,241
Institutional/Public	605	1,016.80	$148,632,419	$24,227,639	$172,860,058
Undeveloped	1,683	1,590.56	$9,609,731	$36,000,841	$45,610,572
TOTAL	9,968	22,590.39	$801,734,435	$232,019,133	$1,033,753,568

Land District 2

Land Use Type	Parcels	Acres	Building Value	Land Value	Total Value
Residential	4,134	2,043.14	$564,652,061	$123,273,542	$687,925,603
Commercial	586	2,187.82	$243,279,200	$98,328,966	$341,608,166
Agriculture	1	5.00	$116,352	$30,000	$146,352
Park/Recreational/Conservation	37	272.92	$52,907,779	$6,633,445	$59,541,224
Institutional/Public	279	766.72	$236,791,442	$16,037,274	$252,828,716
Undeveloped	495	4,444.74	$15,085,827	$28,750,479	$43,836,306
TOTAL	5,532	9,720.33	$1,112,832,661	$273,053,706	$1,385,886,367

Land District 3

Land Use Type	Parcels	Acres	Building Value	Land Value	Total Value
Residential	3,880	2,113.69	$332,292,408	$73,616,334	$405,908,742
Commercial	473	833.34	$234,020,871	$100,460,769	$334,481,640
Industrial	98	3,823.20	$79,931,959	$29,413,898	$109,345,857
Park/Recreational/Conservation	18	115.79	$2,052,576	$3,757,249	$5,809,825
Institutional/Public	130	360.74	$56,877,488	$13,082,066	$69,959,554
Undeveloped	251	547.45	$6,226,368	$7,077,351	$13,303,719
TOTAL	4,850	7,794.20	$711,401,670	$227,407,667	$938,809,337

Table 11 contains tax digest summaries for unincorporated Lowndes County by land district. Data in this table is similar to that in Tables 6 through 10.

Table 11: Tax Digest Summary of Current Conditions - Unincorporated

Land District 1

Land Use Type	Parcels	Acres	Building Value	Land Value	Total Value
Residential	2,031	32,411.14	$177,170,923	$80,950,787	$258,121,710
Commercial	85	311.46	$11,766,859	$5,963,829	$17,730,688
Industrial	41	2,270.90	$135,461,167	$17,447,818	$152,908,985
Agriculture	354	745,030.31	$12,135,639	$526,664,928	$538,800,567
Park/Recreational/Conservation	256	32,992.88	$28,633,859	$33,128,852	$61,762,711
Institutional/Public	85	8,319.06	$16,951,420	$413,353,794	$430,305,214
Undeveloped	275	3,914.78	$676,999	$9,442,586	$10,119,585
TOTAL	3,127	825,250.52	$382,796,866	$1,086,952,594	$1,469,749,460

Land District 2

Land Use Type	Parcels	Acres	Building Value	Land Value	Total Value
Residential	5,902	12,069.44	$716,487,621	$173,447,689	$889,935,310
Commercial	382	2,588.55	$96,435,201	$96,768,366	$193,203,567
Industrial	5	120.41	$1,397,136	$1,445,576	$2,842,712
Agriculture	495	23,069.80	$46,760,265	$44,375,994	$91,136,259
Park/Recreational/Conservation	692	63,084.69	$91,402,377	$93,046,326	$184,448,703
Institutional/Public	223	1,011.49	$72,437,830	$11,424,958	$83,862,788
Undeveloped	1,094	24,015.29	$5,602,379	$74,235,573	$79,837,952
TOTAL	8,793	125,959.67	$1,030,522,809	$494,744,482	$1,525,267,291

Land District 3

Land Use Type	Parcels	Acres	Building Value	Land Value	Total Value
Residential	5,587	12,480.21	$425,630,416	$153,901,179	$579,531,595
Commercial	371	4,578.67	$136,297,803	$45,573,989	$181,871,792
Industrial	68	5,440.44	$41,351,672	$9,016,981	$50,368,653
Agriculture	528	391,771.52	$36,864,024	$295,352,664	$332,216,688
Park/Recreational/Conservation	796	70,353.64	$81,770,076	$110,788,125	$192,558,201
Institutional/Public	317	2,107.05	$83,436,203	$14,536,873	$97,973,076
Undeveloped	2,612	119,478.46	$7,426,981	$166,889,795	$174,316,776
TOTAL	10,279	606,210.00	$812,777,175	$796,059,606	$1,608,836,781

Land District 1A

Land Use Type	Parcels	Acres	Building Value	Land Value	Total Value
Residential	211	381.51	$16,612,732	$3,113,229	$19,725,961
Commercial	22	70.82	$2,152,782	$1,239,477	$3,392,259
Agriculture	1	37.46	$21,696	$47,238	$68,934
Park/Recreational/Conservation	1	84.90	$0	$121,613	$121,613
Institutional/Public	9	24.20	$1,207,244	$100,520	$1,307,764
Undeveloped	132	392.69	$180,282	$1,928,616	$2,108,898
TOTAL	376	991.58	$20,174,736	$6,550,693	$26,725,429

Land District 1B

Land Use Type	Parcels	Acres	Building Value	Land Value	Total Value
Residential	27	34.14	$882,844	$146,294	$1,029,138
Commercial	4	19.84	$2,482,991	$75,163	$2,558,154
Industrial	5	18.33	$257,707	$52,784	$310,491
Agriculture	2	21.31	$252,852	$70,255	$323,107
Undeveloped	47	58.60	$44,861	$237,487	$282,348
TOTAL	85	152.22	$3,921,255	$581,983	$4,503,238

Table 12 provides totals for all incorporated and all unincorporated areas of the county. Notice that average acreage per parcel in the cities is very close to 2, but in unincorporated areas that ratio is about 69 acres to a parcel.

Table 12: Tax Digest Summary of Current Conditions

Area of County	Parcels	Acres	Building Value	Land Value	Total Value
Incorporated totals	22,914	48,036.33	$2,858,947,603	$809,720,504	$3,668,668,107
Unincorporated totals	22,660	1,558,564.00	$2,250,192,841	$2,384,889,358	$4,635,082,199

Figure 10 shows the percentage of developed and undeveloped acreage for incorporated Lowndes County, and Figure 11 shows these percentages for unincorporated Lowndes County. The large percentages for developed acreage are due to the inclusion of agricultural land in the calculations. In some counties, agricultural land is considered as "developable" and is therefore counted in the undeveloped category. Here, acreage with a current land use type of agriculture is counted as developed land.

Figure 10: Incorporated Lowndes County

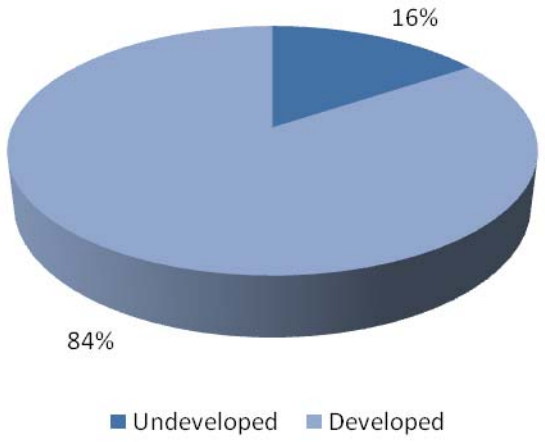
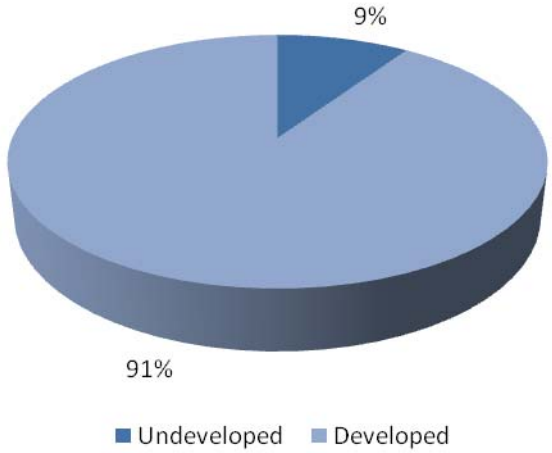


Figure 11: Unincorporated Lowndes County



If agricultural land is taken out of the developed acreage then the percentages change considerably. The percentage of undeveloped acreage rises to 25 percent and 37 percent for incorporated and unincorporated areas, respectively.

Figure 12 shows the distribution of acreage by land use type for incorporated Lowndes County and Figure 13 shows it for unincorporated Lowndes County. These percentages exclude undeveloped acreage. Notice that in the unincorporated area, agriculture is by far the most prevalent land use type, coming in at 82 percent. As expected, the cities have a more balanced distribution but agriculture is still the most prevalent land use type.

Figure 12: Distribution of Acreage by Land Use Type Incorporated Lowndes County

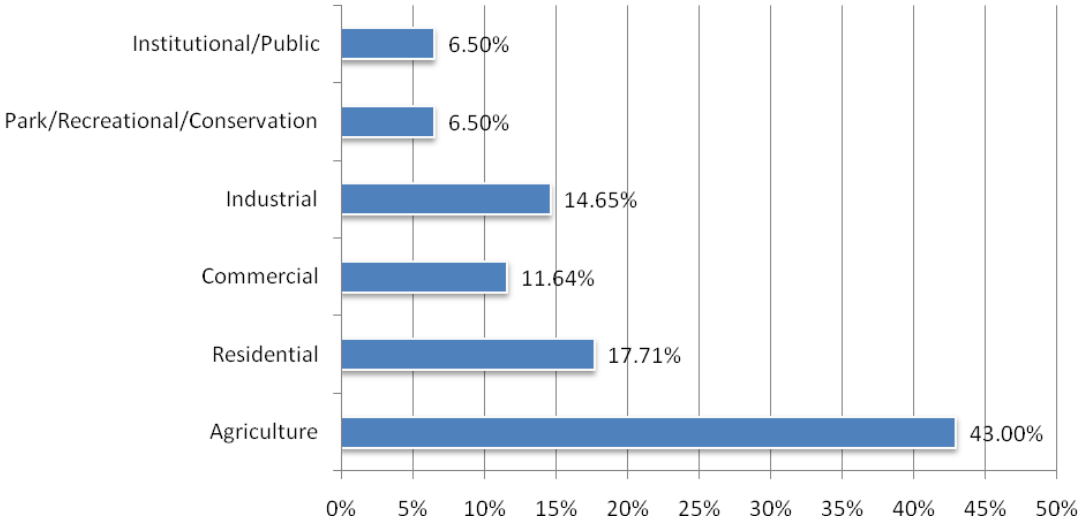
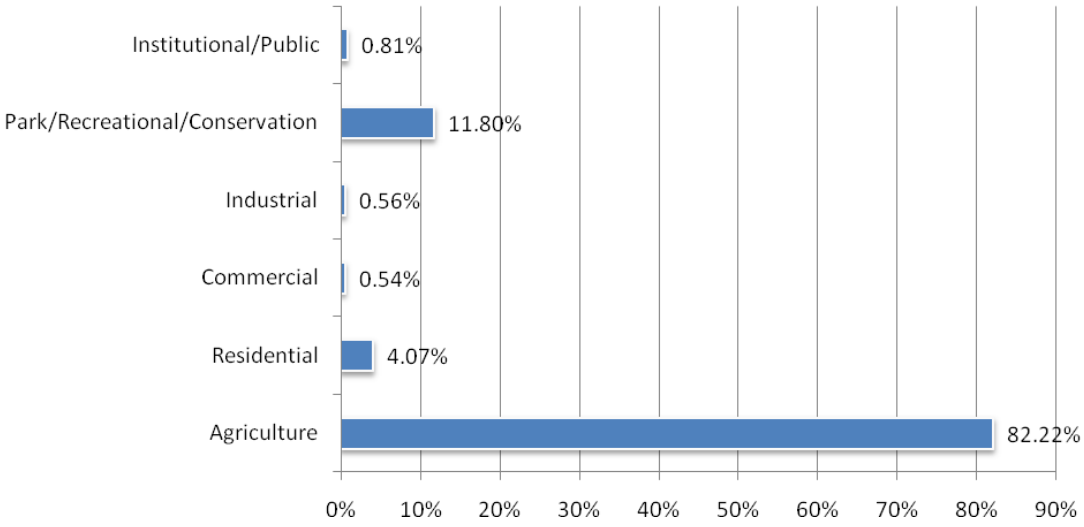


Figure 13: Distribution of Acreage by Land Use Type Unincorporated Lowndes County



Other Property Value Data

For WebFIT™ to estimate the property tax collected from a buildout analysis, it must also generate estimates of personal and inventory property. There also are several other real property classifications found in the tax digest that need to be accounted for. These are: Preferential, Conservation, Utility, and Timber. Two other categories of personal property also need to be accounted for. They are: Mobile Homes and Motor Vehicles. All of these are displayed in WebFIT™ under the "Other Property Tax Info" menu item. Table 13 shows summary values for these categories for incorporated and unincorporated areas of the county. All values in this table are at 100 percent of market value from the 2007 consolidated tax digest.

Table 13: Other Property Value Data - 2007

Type of Property	Incorporated	Unincorporated	Total County
Agricultural land value	$7,738,715	$273,195,075	$280,933,790
Preferential property	$0	$0	$0
Conservation property	$2,579,525	$104,699,183	$107,278,708
Exempted Conservation property	$1,955,898	$74,233,033	$76,188,930
Utility property	$97,674,123	$101,662,955	$199,337,078
Value of Mobile Homes	$3,512,848	$55,643,783	$59,156,630
Timber property	$341,461	$4,605,489	$4,946,950
Residential			
Personal property	$4,241,700	$3,017,655	$7,259,355
Exemptions	$3,869,828	$121,308,095	$125,177,923
Commercial			
Personal property	$182,064,468	$100,122,630	$282,187,098
Inventory property	$145,406,343	$31,685,990	$177,092,333
Freeport	$13,494,993	$8,462,745	$21,957,738
Total inventory property	$158,901,335	$40,148,735	$199,050,070
Industrial			
Personal property	$173,296,518	$147,241,888	$320,538,405
Inventory property	$38,086,683	$24,609,913	$62,696,595
Freeport	$182,961,398	$20,080,055	$203,041,453
Total inventory property	$221,048,080	$44,689,968	$265,738,048
Motor Vehicles			
Number	35,449	41,735	77,184
Value	$261,493,150	$275,443,575	$536,936,725
Average value	$7,377	$6,600	$6,957

Source: Georgia Department of Revenue, Tax Digest Consolidated Summaries, from http://www.dor.ga.gov/DigestConsolidation/Default.aspx

These base year values for personal, inventory, and freeport property, along with the change in real property values for each main land use type, are used in estimating buildout year values.

Other Required Data

To project the county's fiscal situation based on its land use plan, an array of demographic and tax-related data are also needed. Tables 14 and 15 show the list of such data required for WebFIT™ along with current values for the cities, county, and school system. Sources for the data in these tables vary widely, but all should be readily available to county governments.

Table 14: Current Demographics and Tax-Related Data - Cities

Demographics and Residential Densities	Dasher	Hahira	Lake Park	Remerton	Valdosta
Total population (2007)	830	2,261	594	1,018	47,567
Land area in square miles	4.95	2.29	1.47	0.21	31.05
Density (pop per sq mi)	168	987	404	4,848	1,532
Total households (2006)	296	894	242	527	18,155
Persons per household	2.80	2.53	2.45	1.93	2.62
Residential Density - Very Low	0.36	3.11	1.29	15.53	3.11
Residential Density - Low	0.00	0.00	0.00	0.00	0.00
Residential Density - Medium	0.00	0.00	0.00	0.00	0.00
Residential Density - High	0.00	0.00	0.00	0.00	0.00
Residential Density - Ultra High	0.00	0.00	0.00	0.00	0.00
Enrollment	114	530	95	50	279
Percent of population between ages 25-59	48.7%	44.4%	42.8%	36.2%	42.0%
Tax Rates and Related Data					
Property millage rate (county)	9.56	9.56	9.56	9.56	9.56
Property millage rate (city)	0	5.38	4.730	6.415	4.18
Assessment rate	40%	40%	40%		40%
SPLOST/ELOST tax rate	1%	1%	1%	1%	1%
LOST/ELOST tax allocation percentage	0.73%	1.42%	0.48%	0.74%	38.63%
Average % of commercial inventory subject to freeport	0.0%	0.0%	0.0%	0.0%	8.7%
Average % of industrial inventory subject to freeport	0%	94%	93%	100%	83%
Freeport implementation percent	0%	100%	100%	100%	100%

Enrollment figures for the cities are calculated from each city's percentage share of county population and current system-wide enrollment. Of course, differences in demographic makeup of each city and the overall county will add error to these estimates. But, it enables the model to estimate enrollment in each city for the full buildout year. In Table 15, blanks mean that the data item is not used for that jurisdiction.

Table 15: Current Demographics and Tax-Related Data - County and School

Demographics and Residential Densities	Lowndes County	School System
Total population (2007)	101,790	
Land area in square miles	510.63	
Density (pop per sq mi)	199	
Total households (2006)	41,929	
Persons per household	2.43	
Enrollment (2007)		37,701
Percent of population between ages 25-59		46.4%
Tax Rates and Related Data		
Property millage rate (school)		14.95
Assessment rate		40%
SPLOST/ELOST tax rate	2%	1%
LOST/ELOST tax allocation percentage	79.00%	53.30%
Average % of commercial inventory subject to freeport	11%	20%
Average % of industrial inventory subject to freeport	76%	49%
Freeport implementation percent	100%	100%

Local Government Revenues and Expenditures

In WebFIT™, probably the most critical data for the fiscal impact projection are current-year revenues and expenditures. For Lowndes County's implementation, the current or "base" year was 2007 because that was the most recent year of tax digest and local government finance data.

Every year, each Georgia county and city must report its audited revenues and expenditures to the Georgia Department of Community Affairs (DCA). DCA has developed a uniform chart of accounts to enable conformity in these submissions. Georgia Tech researchers obtained a database of this information containing several years' worth of data. These figures are used for the cities and correspond to 2006. County data was received from the county finance director.

In Tables 16 and 17 are displayed revenues by category for Lowndes County, Dasher, Hahira, Lake Park, Remerton, and Valdosta. In Tables 18 and 19 are displayed expenditures by category for the same jurisdictions. School system revenues and expenditures are shown in Table 20.

These values are the starting point for projections, whether a full buildout, greenfield, or redevelopment scenario is run. The debt service shown in the expenditure tables only includes debt retired and interest paid on the debt for non-utility investments in the 2007 base year and is the only item shown in these tables that is not included in WebFIT's starting fiscal values.

Table 16: Revenues by Category - County

Categories	Lowndes County
Property Taxes	
Real And Personal Property Taxes	$17,714,060
Motor Vehicle Taxes	$1,972,557
Tax Collection Fees	$0
Total	$19,686,617
Sales Taxes	
Local Option Sales Tax	$12,908,364
Marta Tax	$0
Special Purpose Sales Tax	$10,333,986
Total	$23,242,350
Excise and Special Use Tax	
Alcoholic Beverage Taxes	$524,243
Insurance Premium Taxes	$2,030,960
Franchise Payment Taxes	$203,964
Total	$2,759,167
Licenses And Permits Revenues	
Business Licenses & Occupational Taxes	$561,606
Alcoholic Beverage Licenses	$130,955
Building Permits	$0
Other License/Permit Revenues	$228,848
Total	$921,409
Service Charges	
Parking Facilities and Meters	$0
Parks and Recreation Charges	$0
Ambulance Charges	$0
Hospital Charges	$0
Special Assessments	$0
Fire Service Subscription Fees	$0
Other Service Charges	$2,564,038
Total	$2,564,038
Fines	
Fines, Forfeits and Court Fees	$3,907,853
Fee Collections Of County Officers	$159,541
Total	$4,067,394
Miscellaneous Revenues	
FIFA, Penalties, Interest and Cost	$466,945
Intangible Taxes	$765,538
Railroad Equipment Tax	$0
Hotel/Motel Tax	$1,817,054
Other Excise and Special Use Taxes	$10,382
Interest Earnings On Investments	$699,950
Receipts From Sale Of Materials and Surplus Equipment	$0
Receipts From Sale Of Real Property (Land and Building)	$0
Rents and Royalties	$84,145
Cemetery Fees	$0
All Additional Revenues	$718,612
Total	$4,562,626
Grand Total	$57,803,601

Table 17: Revenues by Category - Cities

Categories	Dasher	Hahira	Lake Park	Remerton	Valdosta
Property Taxes					
Real And Personal Property Taxes	$0	$127,214	$103,373	$85,638	$7,086,420
Motor Vehicle Taxes	$0	$13,600	$5,429	$2,960	$433,349
Tax Collection Fees	$0	$0	$0	$0	$0
Total	$0	$140,814	$108,802	$88,598	$7,519,769
Sales Taxes					
Local Option Sales Tax	$160,925	$292,248	$97,578	$160,515	$8,386,851
Marta Tax	$0	$0	$0	$0	$0
Special Purpose Sales Tax	$22,218	$196,172	$0	$67,379	$21,197,465
Total	$183,143	$488,420	$97,578	$227,894	$29,584,316
Excise and Special Use Tax					
Alcoholic Beverage Taxes	$0	$34,134	$15,155	$44,217	$925,776
Insurance Premium Taxes	$42,205	$81,436	$27,496	$42,421	$2,217,096
Franchise Payment Taxes	$25,612	$111,707	$29,468	$45,087	$3,421,178
Total	$67,817	$227,277	$72,119	$131,725	$6,564,050
Licenses And Permits Revenues					
Business Licenses & Occupational Taxes	$0	$8,403	$10,915	$48,212	$1,445,843
Alcoholic Beverage Licenses	$0	$4,240	$2,850	$23,700	$283,748
Building Permits	$715	$50	$10,121	$2,920	$15,851
Other License/Permit Revenues	$0	$8,614	$776	$220	$0
Total	$715	$21,307	$24,662	$75,052	$1,745,442
Service Charges					
Parking Facilities and Meters	$0	$0	$0	$0	$0
Parks and Recreation Charges	$0	$0	$3,880	$0	$516,993
Ambulance Charges	$0	$0	$0	$0	$0
Hospital Charges	$0	$0	$0	$0	$0
Special Assessments	$0	$0	$0	$0	$2,567
Fire Service Subscription Fees	$0	$0	$0	$0	$0
Other Service Charges	$0	$2,871	$0	$0	$245,931
Total	$0	$2,871	$3,880	$0	$765,491
Fines					
Fines, Forfeits and Court Fees	$0	$140,158	$28,580	$412,913	$1,152,529
Fee Collections Of County Officers	$0	$0	$0	$0	$0
Total	$0	$140,158	$28,580	$412,913	$1,152,529
Miscellaneous Revenues					
FIFA, Penalties, Interest and Cost	$0	$13,716	$0	$810	$23,173
Intangible Taxes	$0	$10,675	$4,652	$2,333	$144,956
Railroad Equipment Tax	$0	$0	$0	$0	$11,669
Hotel/Motel Tax	$0	$0	$0	$0	$0
Other Excise and Special Use Taxes	$0	$0	$0	$0	$0
Interest Earnings On Investments	$20,446	$13,168	$13,920	$1,995	$506,667
Receipts From Sale Of Materials and Surplus Equipment	$0	$0	$0	$3,450	$0
Receipts From Sale Of Real Property (Land and Building)	$0	$0	$0	$0	$0
Rents and Royalties	$1,510	$175	$0	$8,320	$64,626
Cemetery Fees	$0	$0	$4,125	$0	$178,981
All Additional Revenues	$84	$163,878	$0	$10,971	$5,065,550
Total	$22,040	$201,612	$22,697	$27,879	$5,995,622
Grand Total	$273,715	$1,222,459	$358,318	$964,061	$53,327,219

Debt service is shown in the expenditure tables, but it is optional when including the finance data in WebFIT™. There is no good way to forecast debt service with regression equations so the user has to determine the annual debt service in the full buildout year if they desire to include this expenditure in the model. For the Lowndes County model, we have elected to leave debt service out.

Table 18: Expenditures by Category - County

Categories	Lowndes County
General Government	
General Administration and Support Services	$4,909,458
Financial Administration	$0
Tax Commissioner	$947,830
Tax Assessor/Appraiser	$1,120,168
Community Development	$1,099,773
Natural Resources	$186,534
General Insurance	$0
Legal Fees	$358,916
Building Inspection and Regulation	$0
Total	$8,622,679
Public Works	
General Government Buildings	$6,039,279
Drainage	$43,496
Highways and Streets (not drainage)	$25,404,588
Parking Facilities and Meters	$0
Total	$31,487,363
Court System	
Superior Court	$1,069,318
State Court	$685,572
Juvenile and Magistrate Court	$701,022
Probate Court	$364,152
Clerk of Courts	$1,063,799
Municipal Court	$0
Total	$3,883,864
Public Safety	
Sheriff's Department (incl. Police, Jail)	$9,626,538
Police Department	$0
Correctional Institute	$0
Jail	$5,576,600
Fire Department	$2,206,482
Ambulance Service	$929,966
Total	$18,339,586
Health Services	
County or Municipal Hospital	$0
Payments to Other Hospitals	$0
Public Health	$365,772
Total	$365,772
Public Assistance	$1,992,417
Recreation and Library	
Parks and Recreation	$3,095,494
Education (Expenditures by General Government)	$0
Libraries	$998,700
Total	$4,094,194
Other Expenditures	$2,742,143
Debt Service	$2,729,514
Grand Total	$74,247,532

Table 19: Expenditures by Category - Cities

Categories	Dasher	Hahira	Lake Park	Remerton	Valdosta
General Government					
General Administration and Support Services	$46,629	$127,743	$145,025	$188,854	$3,475,653
Financial Administration	$7,825	$148,489	$0	$14,215	$1,505,219
Tax Commissioner	$0	$0	$0	$0	$0
Tax Assessor/Appraiser	$0	$0	$0	$0	$0
Community Development	$0	$20,658	$0	$0	$330,471
Natural Resources	$0	$0	$0	$0	$0
General Insurance	$2,235	$0	$7,707	$26,108	$33,672
Legal Fees	$3,981	$0	$19,755	$4,283	$0
Building Inspection and Regulation	$1,920	$0	$1,235	$1,641	$374,108
Total	$62,590	$296,890	$173,722	$235,101	$5,719,123
Public Works					
General Government Buildings	$2,775	$104,820	$0	$10,955	$304,533
Drainage	$0	$0	$0	$0	$3,728,941
Highways and Streets (not drainage)	$65,107	$221,345	$57,561	$57,683	$6,515,362
Parking Facilities and Meters	$0	$0	$0	$0	$0
Total	$67,882	$326,165	$57,561	$68,638	$10,548,836
Court System					
Superior Court	$0	$0	$0	$0	$0
State Court	$0	$0	$0	$0	$0
Juvenile and Magistrate Court	$0	$0	$0	$0	$0
Probate Court	$0	$0	$0	$0	$0
Clerk of Courts	$0	$0	$0	$0	$0
Municipal Court	$0	$3,751	$6,454	$6,750	$1,019,576
Total	$0	$3,751	$6,454	$6,750	$1,019,576
Public Safety					
Sheriff's Department (incl. Police, Jail)	$0	$0	$0	$0	$0
Police Department	$10,000	$172,218	$113,264	$393,085	$10,085,823
Correctional Institute	$0	$0	$0	$0	$0
Jail	$0	$9,632	$0	$17,068	$657,083
Fire Department	$0	$185,266	$34,228	$12,659	$6,152,197
Ambulance Service	$0	$0	$0	$0	$0
Total	$10,000	$367,116	$147,492	$422,812	$16,895,103
Health Services					
County or Municipal Hospital	$0	$0	$0	$0	$0
Payments to Other Hospitals	$0	$0	$0	$0	$0
Public Health	$0	$0	$0	$0	$0
Total	$0	$0	$0	$0	$0
Public Assistance	$0	$12,969	$0	$0	$0
Recreation and Library					
Parks and Recreation	$114,806	$43,473	$3,151	$0	$4,969,488
Education (Expenditures by General Government)	$0	$0	$0	$0	$0
Libraries	$0	$0	$0	$0	$0
Total	$114,806	$43,473	$3,151	$0	$4,969,488
Other Expenditures	$0	$0	$9,920	$0	$3,278,811
Debt Service	$0	$195,608	$23,638	$141,838	$1,613,411
Grand Total	$255,278	$1,245,972	$421,938	$875,139	$44,044,348

Table 20: Expenditures by Category - School

Categories	School System
Revenues	
Ad valorem taxes	$17,910,746
Other taxes	$825,534
Other local revenues	$915,198
Total local revenues	$19,651,478
Total state and federal revenues	$50,796,345
Total revenues	$70,447,823
Expenditures	$66,840,951

SECTION 4

Full Buildout and Results

With the WebFIT™ database developed from the information and data shown in Section 3, a full buildout scenario can be developed. This scenario will be referred to as the *full buildout base case* or just *base case*, in the remainder of this section. Full buildout is defined by the developable (undeveloped) parcels in the county that have been defined as any parcel without an improvement on it, according to the current tax digest.

The future land use plan embodied in the GIS files is the basis for assigning a land use type to each developable parcel. The acres of developable land in each tax district, land district, and land use type combination were shown in Tables 3 and 4 above. The base case assumes that all of this acreage is built out according to the land use assigned. In some cases, this is a very large number of acres.

Whether Lowndes County builds out as its future land use plan assumes can only be determined with the passage of time. Surely, the full buildout plan will be updated every few years as the county develops; therefore future buildout assessments will change the quantity of acres devoted to each land use in each tax district and land district combination. WebFIT™ can be used to provide a fiscal impact assessment for each new iteration of the future land use plan.

Building the Base Case

In Section 2, the full buildout setup table was shown using unincorporated, land district 1 as an example. With five cities and five land districts (three commission districts and two special districts) in Lowndes County, there are potentially 25 of these tables but not every land district is in every city (see Table 1 or 3 for all combinations). The actual number of tax district/land district combinations is 12. The data for each is shown below in Tables 21 through 32. Data columns in each table are defined as follows:

- Developed Acres – total acres with improvements in current year
- Avg. Bldg Value Per Acre – total real property value of the improvement divided by total acres
- Avg. Land Value Per Acre – total land value divided by total acres
- Acres Used – total developable acres that are used in this scenario
- Total Acres Available – total developable acres

For a typical full buildout analysis, “acres used” is equal to “total acres available.” Acres-used can be changed to develop a scenario that does not fully build out the total-acres-available.

Table 21: Full Buildout Base Case Setup for Dasher, LD 3

DASHER Land District 03

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Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	DASHER	3	Agricultural	2251	$0	$0	0	0
	DASHER	3	Commercial	25	$0	$0	0	0
	DASHER	3	Institutional/Public	201	$0	$0	0	0
	DASHER	3	Park/Recreational/Conservation	1763	$0	$0	0	0
	DASHER	3	Residential	832	$0	$0	0	0

Table 22: Full Buildout Base Case Setup for Hahira, LD 2

HAHIRA Land District 02

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Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	HAHIRA	2	Commercial	201	$106,928	$15,356	43	43
	HAHIRA	2	Industrial	300	$66,994	$18,429	17	17
	HAHIRA	2	Institutional/Public	187	$0	$0	0	0
	HAHIRA	2	Park/Recreational/Conservation	245	$806	$2,361	125	125
	HAHIRA	2	Residential	287	$162,188	$44,149	339	339

Table 23: Full Buildout Base Case Setup for Lake Park, LD 3

LAKE PARK Land District 03

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Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	LAKE PARK	3	Commercial	95	$111,401	$36,136	3	3
	LAKE PARK	3	Industrial	35	$68,098	$8,380	28	28
	LAKE PARK	3	Institutional/Public	82	$0	$0	0	0
	LAKE PARK	3	Park/Recreational/Conservation	8	$45	$51,780	41	41
	LAKE PARK	3	Residential	189	$117,729	$89,672	356	356

Table 24: Full Buildout Base Case Setup for Remerton, LD 3

REMERTON Land District 03

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Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	REMERTON	3	Commercial	66	$255,028	$108,946	1	1
	REMERTON	3	Institutional/Public	9	$0	$0	0	0
	REMERTON	3	Residential	34	$547,717	$209,087	1	1

Table 25: Full Buildout Base Case Setup for Valdosta, LD 1

VALDOSTA Land District 01

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Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	VALDOSTA	1	Commercial	1307	$207,673	$62,963	190	190
	VALDOSTA	1	Industrial	1574	$56,662	$15,952	172	172
	VALDOSTA	1	Institutional/Public	985	$148,104	$30,832	7	7
	VALDOSTA	1	Park/Recreational/Conservation	211	$15,446	$16,877	90	90
	VALDOSTA	1	Residential	1673	$166,166	$43,161	1132	1132

Table 26: Full Buildout Base Case Setup for Valdosta, LD 2

VALDOSTA Land District 02

Back to Profiles Add New Entry

Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	VALDOSTA	2	Commercial	2184	$111,274	$39,407	9	9
	VALDOSTA	2	Institutional/Public	764	$314,667	$54,897	6	6
	VALDOSTA	2	Park/Recreational/Conservation	273	$193,746	$55,975	537	537
	VALDOSTA	2	Residential	2043	$276,355	$61,922	3893	3893

Table 27: Full Buildout Base Case Setup for Valdosta, LD 3

VALDOSTA Land District 03

Back to Profiles Add New Entry

Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	VALDOSTA	3	Commercial	826	$281,413	$139,852	171	171
	VALDOSTA	3	Industrial	3376	$23,210	$18,710	17	17
	VALDOSTA	3	Institutional/Public	361	$156,250	$43,849	25	25
	VALDOSTA	3	Park/Recreational/Conservation	116	$17,352	$57,491	103	103
	VALDOSTA	3	Residential	2113	$157,478	$45,819	231	231

Table 28: Full Buildout Base Case Setup for Unincorporated, LD 1

UNINCORPORATED Land District 01

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Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	UNINCORPORATED	1	Agricultural	745030	$16	$1,023	578	578
	UNINCORPORATED	1	Commercial	311	$33,407	$21,176	4	4
	UNINCORPORATED	1	Industrial	2271	$59,623	$5,751	679	679
	UNINCORPORATED	1	Institutional/Public	8297	$2,031	$3,909	266	266
	UNINCORPORATED	1	Park/Recreational/Conservation	32993	$868	$1,741	454	454
	UNINCORPORATED	1	Residential	32409	$5,467	$3,699	1934	1934

Table 29: Full Buildout Base Case Setup for Unincorporated, LD 2

UNINCORPORATED Land District 02

Back to Profiles Add New Entry

Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	UNINCORPORATED	2	Agricultural	23070	$2,027	$2,010	9641	9641
	UNINCORPORATED	2	Commercial	2589	$37,236	$26,857	4967	4967
	UNINCORPORATED	2	Industrial	120	$0	$0	0	0
	UNINCORPORATED	2	Institutional/Public	892	$81,425	$20,652	362	362
	UNINCORPORATED	2	Park/Recreational/Conservation	63080	$1,449	$1,813	4313	4313
	UNINCORPORATED	2	Residential	12061	$59,407	$21,616	4733	4733

Table 30: Full Buildout Base Case Setup for Unincorporated, LD 3

UNINCORPORATED Land District 03

Back to Profiles Add New Entry

Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	UNINCORPORATED	3	Agricultural	391767	$94	$871	10074	10074
	UNINCORPORATED	3	Commercial	4578	$29,658	$11,082	1102	1102
	UNINCORPORATED	3	Industrial	5416	$5,587	$3,267	141	141
	UNINCORPORATED	3	Institutional/Public	2083	$40,020	$7,505	1576	1576
	UNINCORPORATED	3	Park/Recreational/Conservation	69275	$1,179	$1,933	80473	80473
	UNINCORPORATED	3	Residential	12478	$34,096	$14,473	26113	26113

Table 31: Full Buildout Base Case Setup for Unincorporated, LD 1A

UNINCORPORATED Land District 1A

Back to Profiles Add New Entry

Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	UNINCORPORATED	1A	Commercial	71	$31,279	$20,241	10	10
	UNINCORPORATED	1A	Institutional/Public	24	$0	$0	0	0
	UNINCORPORATED	1A	Park/Recreational/Conservation	0	$0	$0	0	0
	UNINCORPORATED	1A	Residential	382	$43,591	$8,955	382	382

Table 32: Full Buildout Base Case Setup for Unincorporated, LD 1B

UNINCORPORATED Land District 1B

Back to Profiles Add New Entry

Options	Tax District	Land District	Land Use Type	Developed Acres	Avg. Bldg Value Per Acre	Avg. Land Value Per Acre	Acres Used	Total Acres Available
	UNINCORPORATED	1B	Agricultural	21	$0	$0	0	0
	UNINCORPORATED	1B	Commercial	20	$11,872	$4,385	3	3
	UNINCORPORATED	1B	Industrial	18	$13,707	$4,476	16	16
	UNINCORPORATED	1B	Park/Recreational/Conservation	0	$0	$0	0	0
	UNINCORPORATED	1B	Residential	34	$25,824	$4,903	40	40

Results from the Base Case

All of the data shown in Tables 20 through 33 are used in conjunction with a variety of demographic and tax-related parameters to conduct the full buildout fiscal impact. The demographic and tax-related parameters come from the set of current data (Tables 14 and 15) contained in WebFIT™. Each of these values can be changed for the forecast period, but for this demonstration, they were left at their current values.

There are three groups of results from a WebFIT™ simulation – fiscal impacts, property values, and demographics. In each report, the current or base year values are shown along with the forecast value at full buildout.

Fiscal Impact Results

Figure 14 contains the fiscal impact results for Lowndes County, its school system, and the five cities—Dasher, Hahira, Lake Park, Remerton, and Valdosta. The chart shows the percentage change from 2007 to the full buildout year. In every jurisdiction except Valdosta, revenues grow significantly faster than expenditures.

The positive fiscal impact is in large part due to the relatively slow household growth due to a very low density figure for unincorporated Lowndes County. Population is derived from households and also grows rather slowly despite the large amount of acreage devoted to residential use.

Figure 14: Base Case Results Summary Percentage Change 2007 - Full Buildout

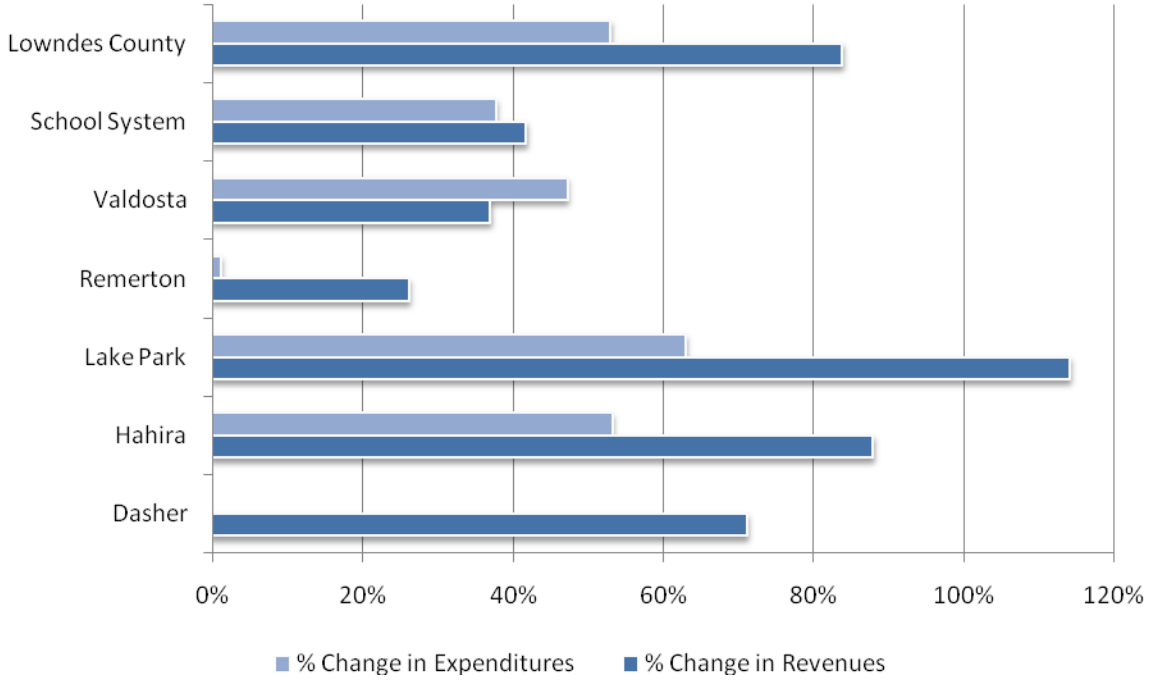


Table 34: Fiscal Impact Results

	Base Year 2007	Full Buildout	Difference	Percentage Change
Dasher				
Revenues	$273,715	$447,082	$173,367	63.34%
Expenditures	$255,278	$255,278	$0	0.00%
Hahira				
Revenues	$1,409,850	$2,445,742	$1,035,892	73.48%
Expenditures	$1,050,364	$1,609,859	$559,495	53.27%
Lake Park				
Revenues	$421,938	$903,336	$481,398	114.09%
Expenditures	$398,300	$649,272	$250,972	63.01%
Remerton				
Revenues	$964,061	$1,150,547	$186,486	19.34%
Expenditures	$733,301	$742,320	$9,019	1.23%
Valdosta				
Revenues	$53,327,219	$73,086,584	$19,759,365	37.00%
Expenditures	$42,430,937	$62,496,940	$20,066,003	47.29%
School System				
Revenues	$70,447,823	$99,903,762	$29,455,939	41.81%
Expenditures	$66,840,951	$92,117,099	$25,276,148	37.82%
Lowndes County				
Revenues	$71,528,018	$131,512,687	$59,984,669	83.86%
Expenditures	$71,528,018	$109,453,252	$37,925,234	53.02%

Property taxes in the buildout year result from the property values for each combination of tax district, land district, and land use type, and the millage rate for each jurisdiction. No change is assumed in the millage rate (in real terms) and no real price escalation in property values is factored in. The average building and land values calculated from current development were used for future development.

All other revenue and all expenditure categories are forecast with a set of regression equations estimated from historical data of county and city revenues and expenditures and the county consolidated tax digest. Because each equation measures the response in a particular revenue or expenditure category to changes in population, residential real property, commercial real property, and industrial real property, each equation is sensitive to the future land use plan.

Figure 15 shows detailed revenue impact results for Lowndes County and Figure 16 shows the expenditure impacts for the county. Property and sales taxes are by far the major components of total revenues for the county and both grow substantially from 2007 to full buildout. Because WebFIT™ does not have a time dimension, that is, it does not forecast annually, the actual full buildout year is not determined.

Figure 15: Lowndes County Revenue Impacts

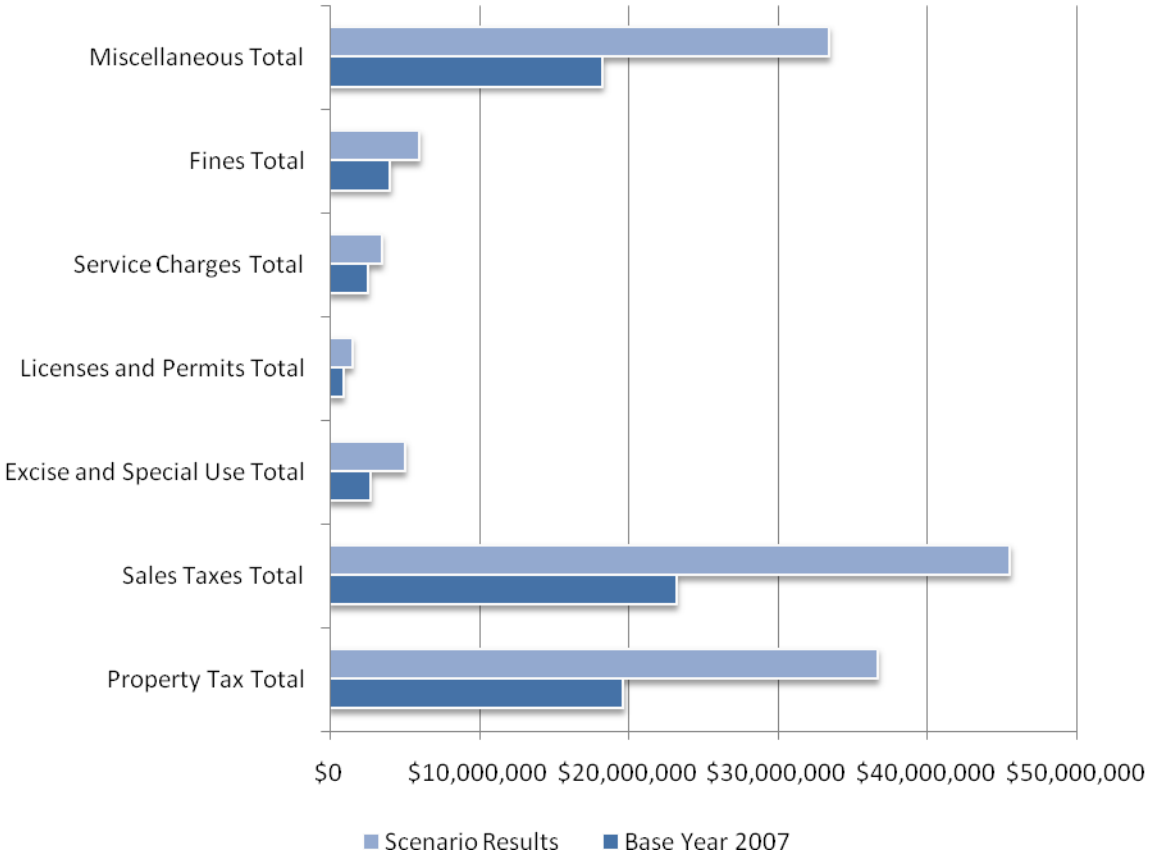
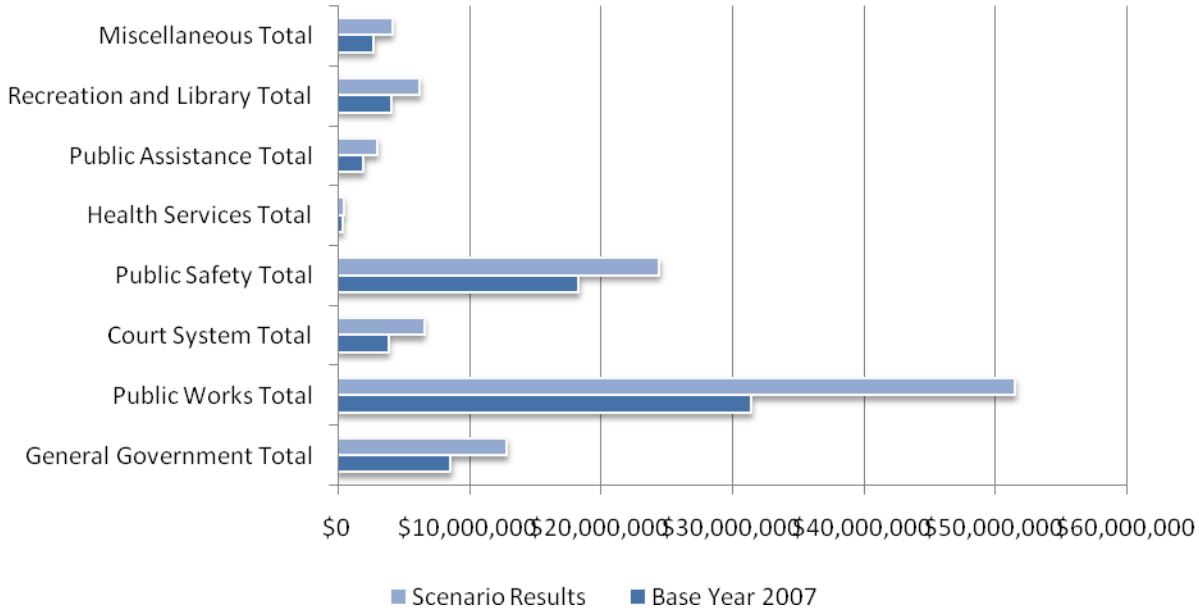


Figure 16: Lowndes County Expenditure Impacts



As Figure 16 shows, the largest components of the county's total expenditures are public safety and public works and both are forecast to grow substantially from 2007 to full buildout.

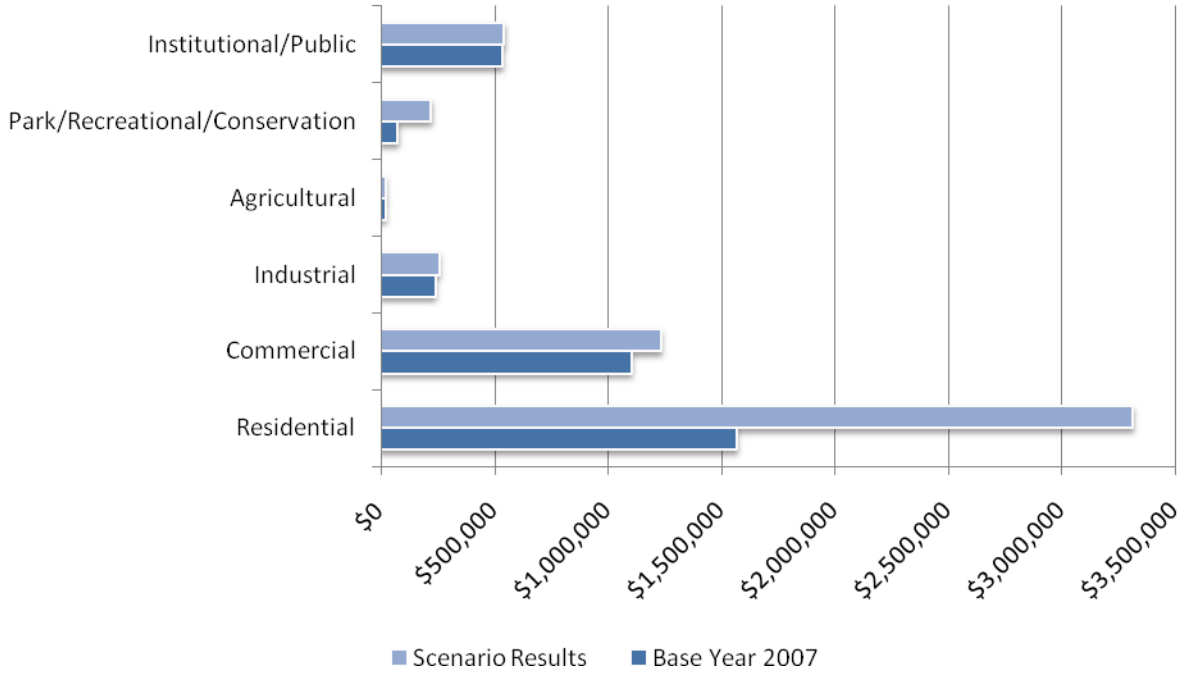
Property Value Results

As mentioned above, the property value forecasts are based on the future land use plan, which makes up the base case simulation. Each future land use type has its own forecast of real property. Personal property, motor vehicles, and inventory property are all forecast proportional to the change in real property values. Figures 17 and 18 contain these forecasts for incorporated and unincorporated Lowndes County, respectively.

The land use type "undeveloped" of course only has a value in the base year 2007 so it is not shown in the charts. The acreage for this land use type is what is built out in the county's future land use plan. In terms of percentage change, residential land use changes by 111 percent in incorporated Lowndes County and by 97 percent in unincorporated Lowndes County. The largest percentage change in unincorporated areas is actually park/recreation/conservation but it makes up a much smaller amount of total property values.

Figure 17: Real Property Values - Incorporated County

Values in $1,000s



Unincorporated Lowndes County real property value results are quite different. Here, agriculture is a much larger share of total property values in the base year and in the buildout year. Residential dominates growth more so in unincorporated areas than in incorporated areas.

The value of industrial sector real property is not that much different in both areas, however, commercial real property values are much larger in incorporated than unincorporated areas.

Figure 18: Real Property Values - Unincorporated County

Values in $1,000s

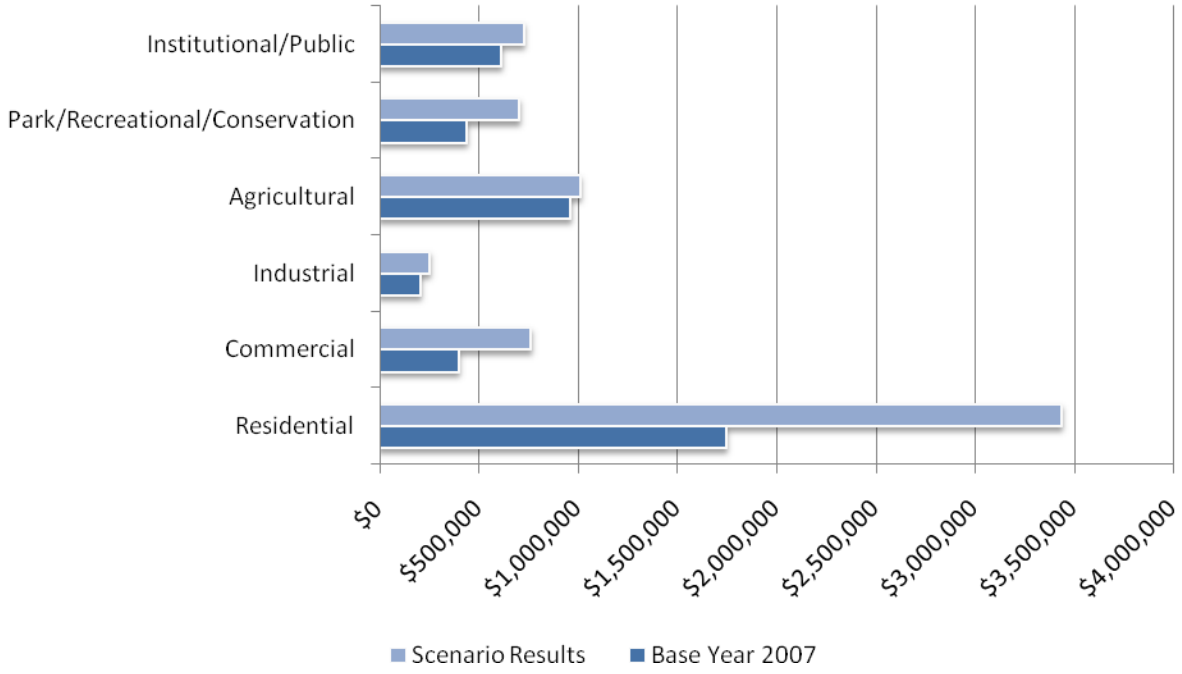
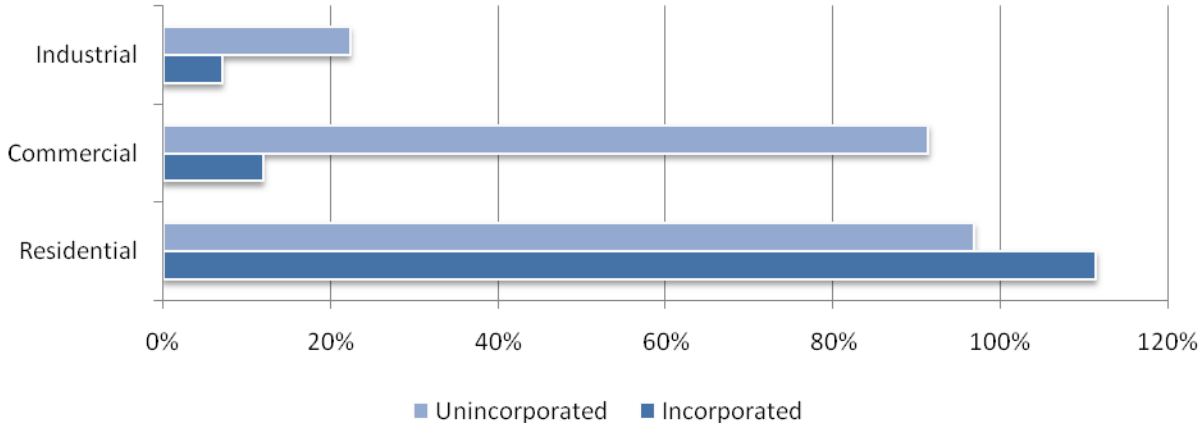


Figure 19 shows the percentage change in residential, commercial, and industrial real property values for unincorporated and incorporated areas of Lowndes County. Although commercial sector real property is much higher in incorporated areas, on a percentage basis, the future land use plan expects a vastly larger percentage change in unincorporated areas.

Figure 19: Percentage Change in Real Property Values

Base Year to Buildout



Demographic Results

The household forecast is based on how much residential growth is embedded in the future land use plan. Figure 20 shows the percentage change in households for each city. Actual values could not be put on the same chart because Valdosta's figures are so much larger than values for the other cities. Figure 21 shows the actual number of households in incorporated and unincorporated areas.

Figure 20: Household Forecast - Cities

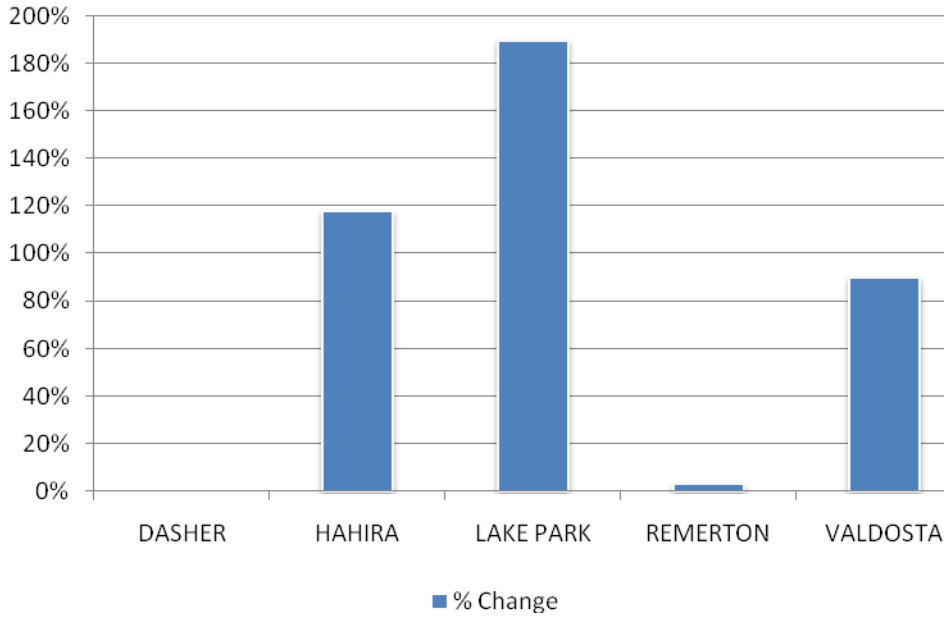
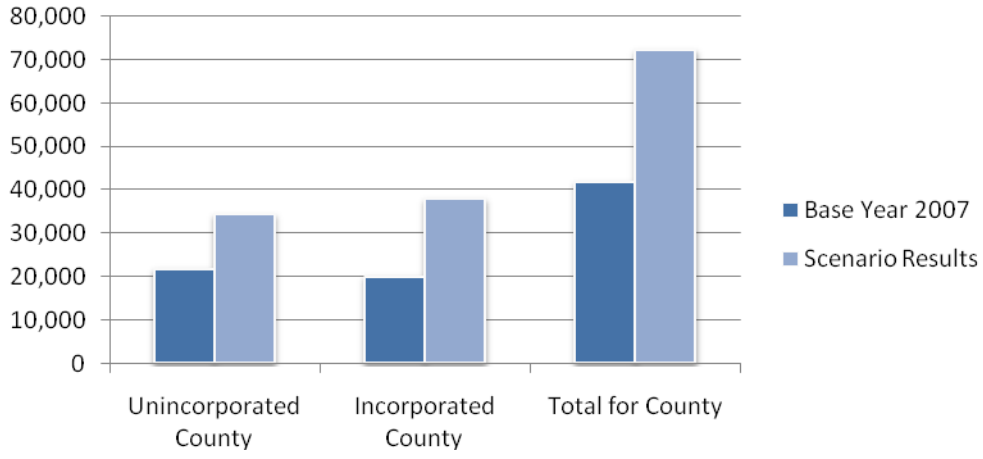


Figure 21: Household Forecast - County



One difficulty in deriving the number of households from the change in residential property values is determining the household density defined as households per acre. The historical value for unincorporated Lowndes County is very low at only .38 (about one house per three acres).

This was used for the forecast value which is why households and population grow relatively slowly even though growth in residential real property values is quite large.

Figure 22 shows the percentage change in population for each city based on the household forecast and historical persons per household. Figure 23 shows the actual population values for unincorporated and incorporated areas of Lowndes County.

Figure 22: Population Forecast - Cities

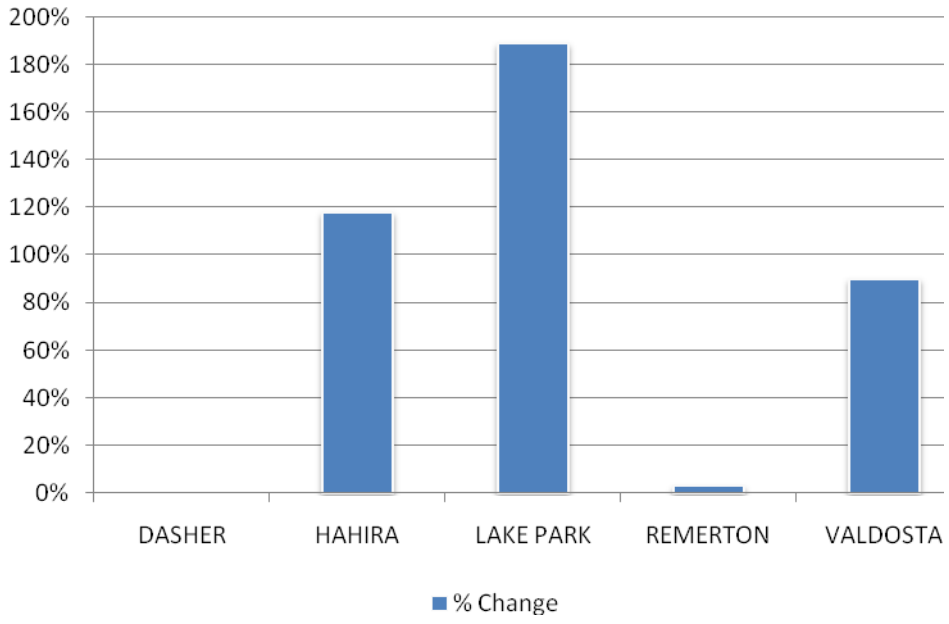
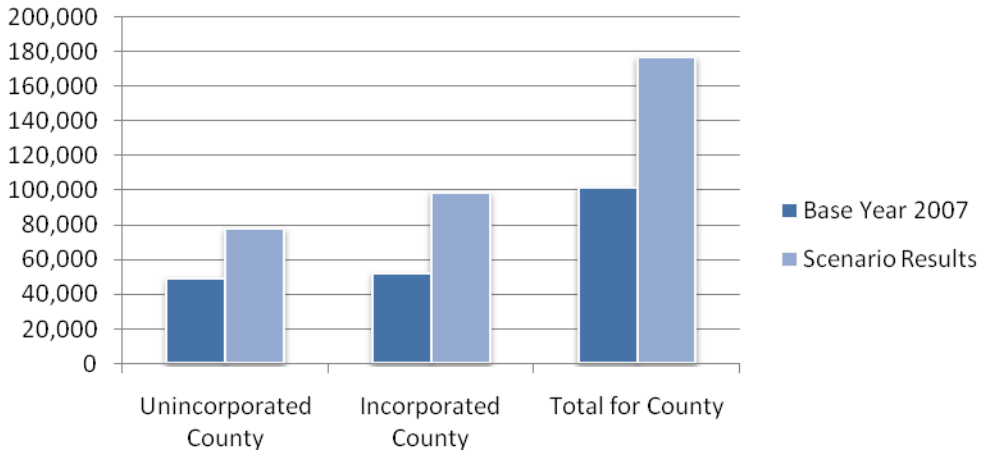


Figure 23: Population Forecast - County



Concluding Remarks

Based on the information provided by Lowndes County officials, a fiscal impact analysis was performed for the current future land use plan. For all jurisdictions, the fiscal impact of the plan is decidedly positive. In large part, this is due in part to the slow growth in population relative to the growth in residential real property. A higher density (households per acre) would probably change the fiscal impact to be less net positive.

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